

The sensor platform is designed for the mounting of heated sensors. Using heat resistance the chip can be kept at a constant temperature or a temperature cycle can be operated. The platform integrates a temperature sensor (Pt 1000), a heater and interdigitated electrode structures (IDES) in platinum thin film on a ceramic substrate. Heater and sensor are covered with an insulating glass layer. Sensitive layers can be applied onto the non-passivated electrode structures by using screen process or drop-coating. That way the Multi-Sensor-Plattform is converted into gas sensors, humidity sensors etc.

### Application

Typical areas of application for the sensor platform are any type of gas sensors and physical sensors such as humidity and air quality sensors.

### Technical data

#### Design

**Heraeus Sensor Technology** designs the Multi-Sensor Plattform with customer-specific sensor layers, heaters and electrode structures in mono- and multi-layer versions. User-defined combinations of these three layers are feasible. Heater and temperature sensors are covered with an insulating glass layer.

#### Layer application

Sensitive layers can be deposited onto the non-passivated electrode structure by using screen process or drop-coating.

#### Connection

Ni Pt wire, 0.15mm diameter  
Au thick film pad for bonding  
Max. Lead length (L): customer specific

#### IDES

Width / length of conductor: 10  $\mu$ m / 10  $\mu$ m

#### Temperature range

-50°C to +500°C (higher temperatures on demand)

#### Nominal resistance, tolerance and stability

**Temperature sensor:**  
1000 $\Omega$  at 0°C, tolerance: Class B according to DIN EN 60 751, max. measuring current 0.3mA

#### Heater:

17.5 $\Omega$   $\pm$ 2,5 $\Omega$ , heating output e.g. 1.7 W at 500°C in air for unspoil Chip

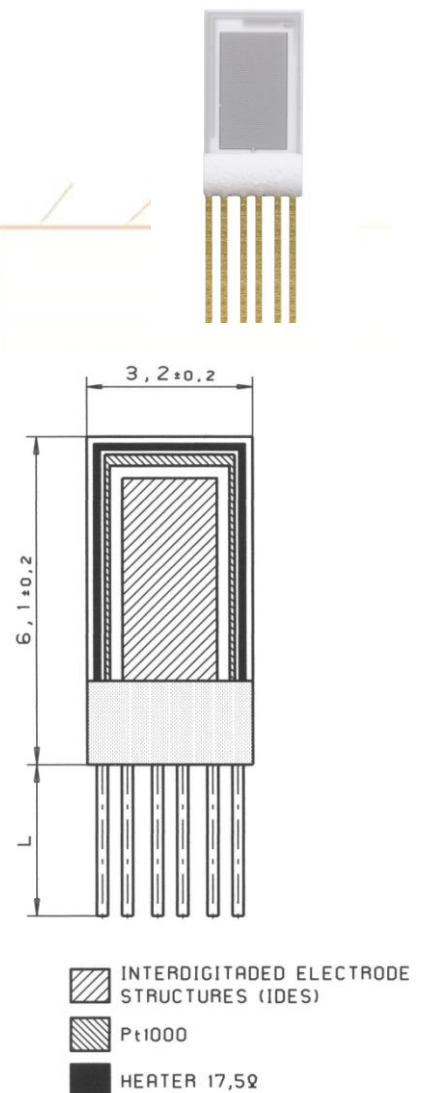
Passed 1000h test at T=500°C

#### Note

Other dimensions, tolerances, values of resistance and leads are available on request.

#### Status

**objective**



We reserve the right to make alterations and technical data printed. All technical data serves as a guideline and does not guarantee particular properties to any products.

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